

Jeopardy Assessment
for the Proposed Incidental Taking Authorization
of the Butler's Garter Snake

Brookfield Academy High School Project
City of Brookfield, Waukesha County, Wisconsin

Background

The state-threatened Butler's garter snake is the smallest of the five Wisconsin garter snake species. Both sexes of this species reach maturity during their second full year and females deliver 4-19 live-born young in mid to late summer. This species requires a moderately open to open canopy habitat, preferably with both upland and wetland habitat. Butler's naturally hibernate in open-canopy wetlands (sedge meadows, fringes of cattail marshes, etc.) but are also known to occupy sites that provide other means for successful overwintering (i.e. old landfills where conditions provide access below the frostline and where adequate moisture exists).

The Butler's garter snake is a colonial species that is restricted to several southeastern counties in Wisconsin. There are currently 30 locations where this species has been documented from 1973 to present. Twenty-five of these records have been documented since 1990. Most sites that have been moderately to heavily surveyed for Butler's show a healthy age-class structure, indicating that regular recruitment is occurring on those sites. Surveys and monitoring since its listing in 1997 reveal that Butler's often occur in very large numbers on relatively small sites (i.e. 400+ snakes detected on a 20-acre site with less than 50% suitable [open canopy] habitat). Three intensive survey/monitoring efforts associated with mitigation for incidental take to date have involved large numbers of Butler's garter snakes (over 1200 Butler's on three isolated sites along Lincoln Creek within the City of Milwaukee). Surveys have also demonstrated that Butler's can occur, sometimes in high numbers, on highly disturbed and degraded sites. One example is the location of 62 Butler's during one survey of a brownfield site in the industrial heart of Milwaukee. Most of the snakes were found under pieces of broken concrete in a large, abandoned, gravel parking lot that was adjacent to a small wetland.

In Summary, the Butler's garter snake is a fast-maturing species with potentially high annual recruitment. It can sustain populations on highly disturbed sites if the disturbance factors are eliminated and suitable wetlands are present on or adjacent to these sites. Since 1997, most sites where Butler's were suspected to occur, based on proximity to known range and habitat and which were subsequently surveyed, verified their presence.

Jeopardy Assessment

Two stormwater ponds related to the proposed Brookfield Academy High School project will be constructed in suitable Butler's gartersnake habitat that is part of a significant conservation (Tier 3) site. This project has the potential to cause incidental take of the Butler's gartersnake, although snake removal efforts will be conducted this summer/fall to minimize take of the snake at this location. An approved conservation plan for the project will also assure no net loss of suitable habitat per the Butler's Gartersnake Conservation Strategy. The following conditions must be met in order for the pending Incidental Take Authorization (ITA) to be issued and remain in effect once issued.

Conditions:

1. The acreage of suitable snake habitat will not diminish for the affected Tier 3 habitat site.
2. Conduct snake removals to minimize take of the snake in the southern detention pond area. This area was originally fenced prior to snake emergence this past spring but it was not maintained as needed to keep snakes out of this area.
3. The suitable habitat being permanently lost in the construction area must be restored to good quality habitat at a 1 to 1 ratio in habitat that is not currently suitable habitat.
4. Any suitable habitat that will be temporarily disturbed in the construction area must be restored to good quality habitat per the Butler's Gartersnake Conservation Strategy (Strategy).
5. Protect all suitable snake habitats that are identified as the Conservation Easement Boundaries in the Butler's Gartersnake Conservation Plan for the Brookfield Academy Sports Center dated 23 July 2008 through a conservation easement between Brookfield Academy and the Wisconsin Department of Natural Resources or a Department-approved land trust.
6. Conduct annual management of all suitable snake habitat held by the conservation easement as required in the Strategy for Tier 3 sites such that it remain as good quality habitat as defined by the Strategy.

The Department has determined that the proposed project is not likely to jeopardize the continued existence or recovery of the state population of these snakes or the whole plant-animal community of which they are a part if the conservation plan is strictly adhered to.